FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO.	SERIAL NO.
3		38979-80US	10/054,451
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OPSTA	TEMENT BY APPLICANT	Petro Estakhri	
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## U. S. PATENT DOCUMENTS

EXAMIN NITIAL	IER		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
n.	Ni	A1	4,210,959	07/01/1980	Wozniak	364	200	
(		A2	4,355,376	10/19/1982	Gould	365	230	·
		A3	4,405,952	09/20/1983	Slakmon	360	49	
		A4 .	4,450,559	05/22/1984	Bond et al.	371	10	
		A5	4,456,971	06/26/1984	Fukuda et al.	364	900	
		A6	4,498,146	02/05/1985	Martinez	364	900	
$\exists$	,	A7	4,525,839	06/25/1985	Nozawa et al.	371	38	TEN/ED
7		A.8	4,616,311	10/07/1986	Sato	364	200 RE	FLIVED
$\top$		A9	4,654,847	03/31/1987	Dutton	371	10 MAI	R 1 1 2004
1		A10	4,710,871	12/01/1987	Belknap et al.	364	<del></del>	ogy Center 2100
7		A11	4,746,998	05/24/1988	Robinson et al.	360	72.1	9,000.
1		A12	4,748,320	05/31/1988	Yorimoto et al.	235	492	
		A13	4,757,474	07/12/1988	Fukushi et al.	365	189	
		A14	4,774,700	09/27/1988	Satoh et al.	369	54	
		A15	4,800,520	01/24/1989	Iijima	364	900	
		A16	4,896,262	01/23/1990	Wayama et al.	364	200	
		A17	4,914,529	04/03/1990	Bonke	360	48	7
		A18	4,920,518	04/24/1990	Nakamura et al.	365	228	
		A19	4,924,331	05/08/1990	Robinson et al.	360	72.1	
		A20	4,953,122	08/28/1990	Williams	364	900	·
		A21	5,070,474	12/03/1991	Tuma et al.	395	500	
		A22	5,168,465	12/01/1992	Harari	257	320	
		A23	5,198,380	03/30/1993	Harari	437	43	
V		A24	5,200,959	04/06/1993	Gross et al.	371	21.6	
		A25	5,226,168	07/06/1993	Kobayashi et al.	395	800	
N.	N·	A26	5,268,318	12/07/1993	Harari	437	43	

FORM PTO-1440 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

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APPLICANT

Petro Estakhri

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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
M, N.	A27	5,268,870	12/07/1993	Harari	365	218	
1	A28	5,270,979	12/14/1993	Harari et al.	365	218	
	A29	5,293,560	03/08/1994	Harari	365	185	
	A30	5,297,148	03/22/1994	Harari et al.	371	10.2	
	A31	5,303,198	4/12/1994	Adachi et al.	365	218	
	A32	5,315,541	05/24/1994	Harari et al.	365	63	
	A33	5,337,275	08/09/1994	Garner	365	189.01	
	A34	5,341,330	08/23/1994	Wells et al.	365	185	
· · ·	A35	5,341,339	08/23/1994	Wells	365	218	
	A36	5,353,256	10/04/1994	Fandrich et al.	365	230.03	
	A37	5,357,475	10/18/1994	Hasbun et al.	365	218	
	A38	5,369,615	11/29/1994	Harari et al.	365	218	
	A39	5,388,083	02/07/1995	Assar et al.	365	218	
	A40	5,396,468	03/07/1995	Harari et al.	365	218	
	A41	5,418,752	05/23/1995	Harari et al.	365	218 RE	CEIVED
	A42	5,422,842	06/06/1995	Cernea et al.	365	185	AR 1 1 2004
	A43	5,428,621	06/27/1995	Mehrotra et al.	371	21.4	
	A44	5,430,859	07/04/1995	Norman et al.	395	425 Tesnr	<del>ology Center 210</del>
	A45	5,434,825	07/18/1995	Harari	365	185	
	A46	5,438,573	08/01/1995	Mangan et al.	371	10.3	
	A47	5,471,478	11/28/1995	Mangan et al.	371	10.3	
	A48	5,479,638	12/26/1995	Assar et al.	395	430	
	A49	5,485,595	01/16/1996	Assar et al.	395	430	
	A50	5,495,442	02/27/1996	Cernea et al.	365	185.03	<b>†</b>
	A51	5,504,760	04/02/1996	Harari et al.	371	40.1	
	A52	5,508,971	04/16/1996	Cernea et al.	365	185.23	
<del>.  </del>	A53	5,524,230	06/04/1996	Sakaue et al.	395	430	· · · · · · · · · · · · · · · · · · ·
<i>M</i> . N	/ A54	5,532,962	07/02/1996	Auclair et al.	. 365	201	

	FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE	ATTY DOCKET NO.	SERIAL NO.
6	PATENT AND TRADEMARK OFFICE	38979-80US	10/054,451
1	- MUY hi	APPLICANT	
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Examiner	Γ	DOCUMENT NUMBER	DATE	COUNTRY	NAME	CLASS	SUBCLASS	TRANS	LATION
Initials		D000						YES	NO
M. N.	B7	61-96598 (A)	15.05.1986	JР	Yutaka Haniyu	G 11 C	17/00	X	
1.	B8	62-283496 (A)	09.12.1987	JP	Shinichi Nakada	G 11 C	17/00	X	
	<b>B</b> 9	62-283497 (A)	09.12.1987	JР	Shinichi Nakada	G 11 C	17/00	Х	·
	B10	63-183700 (A)	29.07.1988	JP	Kazuo Ishikawa	G 11 C	17/00	Х	
	B11	0 557 723	08.01.1987	AU	Kevin John Burke	G 11 C	5/00	Х	
	B12	0 220 718 A2	06.05.1987	EP	Yorimoto et al.	G 06	15/40	X	
	B13	0 243 503 A1	04.11.1987	EP	Fukushima et al.	G 11	. 20/10	Х	
	B14	0 424 191 A2	24.04.1991	EP	Stephen Gross	G 06	11/00	X.	
	B15	0 489 204 A1	10.06.1992	EP	Kevin Lloyd-Jones	G 11 C	16/06	Х	
	B16	0 522 780 A2	13.01.1993	EP	Sakaue et al.	G 06	3/06	X	
	B17	0 544 252 A2	02.06.1993	EP	Matsui et al.	G 11	16/06	Х	
	B18	0 686 976 A2	13.12.1995	EP	Matsui et al.	G 11	16/06	х	
	B19	93 01908	27.08.1993	FR	Hiroyuki et al.	G 06	12/02	Х	
M.N	B20	84/00628	16.02.1984	WO	Maria Martinez	G 06 F	11/20 C	EI	ED

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## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

ps. N.	Cl	Book - Computer Architecture and Parallel Processing, Kai Hwang & Faye A. Briggs, McGraw-Hill Book Co., © 1984, Page 64.
m.N	C2	Magazine - "State of the Art: Magnetic VS. Optical Store Data in a Flash", by Walter Lahti and Dean McCarron, Byte magazine dated 11/1/90. 311, Vol. 15, No. 12.
p.N.	СЗ	Magazine - Technology Updates, Integrated Cirrcuits, "1-Mbit flash memories seek their role in system design", Ron Wilson, Senior Editor Computer Design magazine 28 (1989) March 1, No.5, Tulsa OK, US, pages 30 and 32
m.N	C4	1992 Symposium of VLSI Circuits Digest of Technical Papers, "EEPROM for Solid State Disk Applications", S. Mehoura et al., SunDisk Corporation, Santa Clara, CA, R.W. Gregor et al., AT&T Bell Laboratories, Allentown, PA. Pages 24 and 25.

EXAMINER DATE CONSIDERED 4 -27 - 529

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
M.N.	A55	5,532,964	07/02/1996	Cernea et al.	365	189.09	
1	A56	5,534,456	07/09/1996	Yuan et al.	437	43	
	A57	5,535,328	07/09/1996	Harari et al.	395	182.05	
	A58	5,544,118	08/06/1998	Harari	365	218	
	A59	5,544,356	08/06/1996	Robinson et al.	395	600	
	A60	5,554,553	09/10/1996	Harari	437	43	
	A61	5,563,825	10/08/1996	Cernea et al.	365	185.18	
	A62	5,566,314	10/15/1996	DeMarco et al.	395	430	
	A63	5,568,439	10/22/1996	Harari	365	218	
	A64	5,583,812	12/10/1996	Harari	365	185.33	
	A65	5,592,420	01/07/1997	Cernea et al.	365	185.18	
	A66	5,642,312	06/24/1997	Harari	365	185.33	
	A67	5,663,901	09/02/1997	Wallace et al.	365	52	
	A68	5,693,570	12/02/1997	Cernea et al.	437	205	DECENTED.
	A69	5,712,819	01/27/1998	Harari	365	185.29	RECEIVED
	A70	5,719,808	02/17/1998	Harari et al.	365	185.33	MAR 1 1 2004
M.N.	A71	5,778,418	07/07/1998	Auclair et al.	711	101 Te	echnology Center 2100

## FOREIGN PATENT DOCUMENTS

Examiner	<u> </u>	DOCUMENT NUMBER	DATE	COUNTRY	NAME	CLASS	SUBCLASS	TRANS	LATION
Initials	ļ							YES	NO
M.N.	BI	4-332999 (A)	19.11.1992	JP	Masakazu Namekawa	G11 C	29/00	X	
	B2	58-215794 (A)	15.12.1983	JP	Noriyuki Tanaka	G11 C	17/00	X	
	В3	58-215795 (A)	15.12.1983	JP	Noriyuki Tanaka	G11 C	17/00	Х	
	B4	59-45695 (A)	07.09.1982	JP	Yuuichi Furukawa	G11 C	17/00	Х	
	B5	59-162695 (A)	13.09.1984	JP	Toshi Ninomiya (1)	G11 C	17/00	Х	
Jr.N	B6	60-212900	25.10.1985	JP	Tsuneaki Higashi	G11 C	29/00	Х	

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First Named Inventor	Petro Estakhri	MAR 1 8 DIG
Group Art Unit	2188	
Examiner Name	Namazi, Mehdi	PATENT A TO
Attorney Docket Number	38979-80US	

	,	<del></del>		U.S. PATENT DOCUM	Date of Publication of	Pages, Columns, Lines,
		U.S. Patent Document				, ages, commission
1.19	A1	2003/0033471	A1	J.C. Patents, Inc.	02/13/2003	
1	A2	6,411,546	B1	Lexar Media, Inc.	06/05/2002	
1-	A3	6,397,314	B1	Lexar Media, Inc.	05/28/2002	
+	A4	6,393,513	B2	Lexar Media, Inc.	05/21/2002	RECEIVED
+	A5	6,374,337	B1	Lexar Media, Inc.	04/16/2002	
1-	A6	6,279,114	B1	SanDisk Corporation	08/21/2001	MAR 1 8 2004
+	A7	6,279,069	B1	Intel Corporation	08/21/2001	WAN I C -
	A8	6,272,610	B1	Hitachi, Ltd.	08/07/2001	Technology Center 210
<del></del>	A9	6,262,918	B1	Lexar Media, Inc.	07/17/2001	rechnology ochron 210
	A10	6,230,234	B1	Lexar Media, Inc.	05/08/2001	
	A11	6,226,708	B1	Texas Instruments	05/01/2001	
	A12	6,223,308	B1	Incorporated  Lexar Media, Inc.	04/24/2001	
	A13	6,202,138	B1	Lexar Media, Inc.	03/13/2000	
	A13	6,182,162	B1	Lexar Media, Inc.	01/30/2001	
4	A14 A15	6,181,118	B1	Analog Devices, Inc.	01/30/2001	
	A15	6,173,362	B1	Kabushiki Kaisha	01/09/2001	-
	AIG			Toshiba		
	A17	6,151,247		Lexar Media, Inc.	11/21/2000	
	A18	6,145,051		Lexar Media, Inc.	11/07/2000	
	A19	6,141,249		Lexar Media, Inc.	10/31/2000	
$\dashv$	A20	6,134,151		Lexar Media, Inc.	10/17/2000	
_	A21	6,134,145		SanDisk Corporation	10/17/2000	
$\dashv$	A22	6,128,695		Lexar, Media, Inc.	10/03/2000	
_	A23	6,125,435		Lexar Media, Inc.	09/26/2000	
-	A24	6,125,424		Fujitsu Limited	09/26/2000	
-	A25	6,122,195		Lexar Media, Inc.	09/19/2000	
-	A26	6,115,785		Lexar Media, Inc.	09/05/2000	
	A27	6,097,666		Kabushiki Kaisha	08/01/2000	
	A28	6,081,878	<del></del>	Toshiba Lexar Media, Inc.	06/27/2000	
	A29	6,081,447	<del>                                     </del>	Western Digital Corporation; Sandisk	06/27/2000	
	A30	6,072,796	+	Corporation Avid Technology, Inc.	06/06/2000	
	A30 A31	6,055,188	<del> </del>	Kabushiki Kaisha	04/25/2000	
				Toshiba	04/25/2000	
	A32	6,055,184		Texas Instruments Incorporated		
$\vdash$	A33	6,047,352	1	MicronTechnology,Inc.	04/04/2000	
$\top$	A34	6,040,997	1 -	Lexar Media, Inc.	03/21/2000	
_	A35	6,035,357		Kabushiki Kaisha Toshiba	03/07/2000	
	A36	6,034,897	+	Lexar Media, Inc.	03/07/2000	
-	A37	6,026,027		Norand Corporation	02/15/2000	
+	A38	6,026,020	+	Hitachi Ltd.; Hitachi	02/15/2000	
	İ		ļ	VLSI Engineering Corp. Veritas Software Corp.	02/01/2000	
	A39	6,021,408		International Business	01/04/2000	
	A40	6,011,323	1	Machines Corporation		
+	A41	6,011,322		Sony Corporation; Sony Trans Com, Inc.	01/04/2000	
+	A42	5,991,849	<del> </del>	Sanyo Electric Co., Ltd.	11/23/1999	
	√ A43	5,987,573		Tokyo Electron Limited	11/16/1999	

if Known Comp JC67 Substitute for form 1449A/PTO 10.054,451 **Application Number** 01/18/2002 INFORMATION DISCLOSURE Filing Date Petro Estakhri STATEMENT BY APPLICANT First Named Inventor Group Art Unit 2188 PATEN! Namazi, Mehdi (use as many sheets as necessary) **Examiner Name** 38979-80US 6 2 Attorney Docket Number of Sheet 11/16/1999 Fujitsu Limited 5,987,563 A44 11/16/1999 Kabushiki Kaisha 5,986,933 A45 Toshiba 10/12/1999 5,966,727 Dux Inc. A46 09/28/1999 Dallas Semiconductor 5,959,926 A47 Corp. 09/21/1999 Macronix International A48 5,956,473 Co., Ltd. 09/14/1999 Lexar Media, Inc. A49 5,953,737 M-Systems Flash Disk 08/10/1999 A50 5,937,425 Pioneers, Ltd.
SanDisk Corporation 08/10/1999 5,936,971 A51 08/03/1999 RECEIVED NEC Corporation A52 5,933,846 08/03/1999 Macronix International 5,933,368 A53 Co., Ltd. Lexar Media, Inc. 07/27/1999 MAR 1 8 2004 A54 5,930,815 07/27/1999 Lexar Media, Inc. 5.928,370 A55 07/06/1999 Technology Center 2100 Hyundai Electronics A56 5,920,884 America.Inc The Foxboro Company 06/01/1999 A57 5,909,586 05/25/1999 Lexar Media, Inc. A58 5.907,856 05/04/1999 Motorola, Inc. 5,901,086 A59 03/30/1999 SanDisk Corporation 5,890,192 A60 Integrated Silicon 01/19/1999 A61 5,862,099 Solution , Inc.
Intel Corporation 01/12/1999 5,860,124 A62 01/12/1999 Kabushiki Kaisha 5,860,083 A63 Toshiba 12/08/1998 Dell USA, L.P. 5.847,552 A64 12/01/1998 Lexar Media, Inc. A65 5,845,313 11/10/1998 Lexar Media, Inc. A66 5,835,935 11/03/1998 Micron Technology, Inc. 5,831,929 A67 10/13/1998 Intel Corporation 5.822,781 A68 10/13/1998 Aplus Integrated A69 5,822,252 Circuits, Inc. 01/13/1998 **Atmel Corporation** 5,822,245 A70 10/06/1998 Lexar Media, Inc. A71 5,818,781 Compaq Computer Corporation 09/15/1998 5,809,560 A72 Intel Corporation 09/15/1998 A73 5,809,558 09/15/1998 Hitachi, Ltd. 5,809,515 A74 09/01/1998 Fujitsu Limited A75 5,802,551 08/25/1998 M-Systems Flash Disk A76 5,799,168 Pioneers, Ltd. 07/28/1998 Micron Technology, Inc. 5,787,484 **A77** 07/28/1998 Norris Communications 5,787,445 A78 Corporation 07/14/1998 Kabushiki Kaisha 5,781,478 A79 **Toshiba** Edward A. Kantner 06/30/1998 5.773,901 A80 Kabushiki Kaisha 06/16/1998 A81 5,768,195 Toshi<u>ba</u> Kabushiki Kaisha 06/16/1998 A82 5,768,190 Toshiba Sanyo Electric Co., Ltd. 06/02/1998 5,761,117 A83 05/26/1998 Sun Microsystems, Inc. 5,758,100 A84 International Business 05/26/1998 A85 5,757,712 Machines Corporation 05/19/1998 Micron Quantum 5,754,567 A86 Devices, Inc. Macronix International Co., Ltd. 04/28/1998 5,745,418 A87 03/31/1998 Siemens A88 5,734,567 Aktiengesellschaft

03/03/1998

Micron Quantum

Devices, Inc

A89

5,723,990

if Known Comp Substitute for form 1449A/PTO 10/054,451 **Application Number** 01/18/2002 INFORMATION DISCLOSURE Filing Date Petro Estakhri STATEMENT BY APPLICANT **First Named Inventor** Group Art Unit 2188 PATENT Namazi, Mehdi (use as many sheets as necessary) **Examiner Name** 38979-80US 6 3 Attorney Docket Number of Sheet 07/15/1997 Mitsubishi Electric 5,648,929 A90 Semiconductor Software Co., Ltd, Mitsubishi Denki Kabushiki Kaisha p.N 03/11/1997 Kabushiki Kaisha 5,611,067 A91 Toshiba 02/11/1997 Kabushiki Kaisha 5,603,001 A92 Toshiba 02/11/1997 SanDisk Corporation A93 5,602,987 01/28/1997 International Business A94 5,598,370 Machines Corporation 01/07/1997 Hitachi, Ltd. A95 5,592,415 12/03/1996 Intel Corporation 5,581,723 A96 RECEIVED Kabushiki Kaisha 11/26/1996 5,579,502 A97 Toshiba 11/05/1996 Kabushiki Kaisha 5,572,466 A98 MAR 1 8 2004 Toshiba United Microelectronics 09/03/1996 A99 5,552,698 08/06/1996 Technology Center 210 Intel Corporation A100 5,544,356 07/30/1996 Advanced Micro 5,541,551 A101 Devices, Inc. 06/25/1996 Seiko Instruments Inc. A102 5,530,938 06/25/1996 Hitachi, Ltd. 5,530,828 A103 06/25/1996 Hitachi Ltd., Hitachi A104 5,530,673 Keiyo Engineering Co., Ltd, Hitachi ULSI Engineering Corp 06/04/1996 International Business A105 5,524,230 Machines Incorporated 06/04/1996 Kabushiki Kaisba 5.523,980 A106 Toshiba Intel Corporation 05/21/1996 5,519,847 A107 05/07/1996 Hitachi, Ltd. A108 5,515,333 04/30/1996 Ricoh Co., Ltd. A109 5,513,138 02/06/1996 Seiko Epson A110 5,490,117 Corporation 12/26/1995 Cirrus Logic, Inc. A111 5,479,638 12/05/1995 3COM Corporation 5,473,765 A112 11/07/1995 Conner Peripherals, Inc. 5,465,338 A113 Kabushiki Kaisha 11/07/1995 5,465,235 A114 Toshiba **Emitec Gesellschaft** 07/11/1995 A115 5,431,330 Emissionstechnologie 07/04/1995 **NEC Corporation** 5,430,682 A116 06/06/1995 Hitachi, Ltd. 5,422,856 A117 05/23/1995 Sundisk Corporation 5,418,752 A118 04/11/1995 Kabushiki Kaisha 5,406,527 A119 Toshiba M-Systems Flash Disk Pioneers Ltd. 04/04/1995 A120 5,404,485 02/07/1995 Cirrus Logic, Inc. 5,388,083 A121 01/24/1995 SGS-Thompson 5,384,743 A122 Microelectronics, S.A. 01/17/1995 Mitsubishi Denki Kabushiki Kaisha 5,382,839 A123 01/10/1995 **EMC Corporation** 5,381,539 A124 12/06/1994 Kabushiki Kaisha 5,371,702 A125 Toshiba Hewlett-Packard 11/15/1994 A126 5,365,127 Company Hitachi Ltd. 10/25/1994 A126B 5,359,569 **NEC Corporation** 08/23/1994 5.341,341 A127 08/23/1994 Intel Corporation A128 5,341,339 08/23/1994 Intel Corporation

07/12/1994

Intel Corporation

5,341,330

5,329,491

A129

A130

NEC Corporation

Data General

Motorola, Inc.

Corporation

Corporation

Seikosha

Corp.

Corporation
Storage Technology
Corporation

Thomson Components-

Mostek Corporation

Storage Technology

McDonnell Douglas

Nippon Electric Co., Ltd.

Kabushiki Kaisha Daini

Tokyo Shibaura Electric Co., Ltd.

Westinghouse Electric

Microsoft Corporation

4.780.855

4,609,833

4,532,590

4,476,526

4,473,878

4,468,730

4,414,627

4,398,248

4.309,627

4,130,900

4,099,069

35,881 Re.

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A148

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A150

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A154

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A157

10.00	,,,,_		Foreign Patent ent			Date of Publication of  Cited Document	Pages, Columns, Lines, Where Relevant	
Examiner Initials*	Cite No. <sup>1</sup>	Count y Code	Number <sup>4</sup>	Kind Code <sup>s</sup> (if known)	Name of Patentee or Applicant of Cited Document	MM-DD-YYYY	Passages or Relevant Figures Appear	Τ <sup>6</sup>
M.N	B1	<del> </del>	0 663 636	A1	Sun Microsystems, Inc.	07/19/1995		
1	B2		0 619 541	A2	Hitachi, Ltd., Hitachi Keiyo Engineering Co., Ltd, Hitachi ULSI Engineering Corp.	10/12/1994		
_	B3 -	1	0 617 363	A2	Sundisk Corporation	09/28/1994		
	B4	+	0 613 151	A2	Kabushiki Kaisha Toshiba	08/31/1994		
-	B5	<u> </u>	0 522 780	A2	International Business Machines Corporation	01/13/1993		
	В6	-	0 522 780	B1	International Business Machines Corporation	01/13/1993		4-
	B7	+	0 392 895	A2	Sundisk Corporation	10/17/1990		

10/25/1988

09/02/1986

07/30/1985

10/09/1984

09/25/1984

08/28/1984

11/08/1983

08/09/1983

01/05/1982

12/19/1978

07/04/1978

08/25/1998

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	(use as r	nany sheets as necess	ary)	Examiner Name		Namazi, Mehdi	CAVEN	ممنعسة	
	<del>,`</del>		6	Attorney Docket N	lumber	38979-80US			
Sheet	B8	5 of	ТМ	itsubishi Denki Kabushiki	03/19/1997				
M.N.			l Ka	emory Corporation	02/07/1996	6		+	
	B9	2 291 990		tel Corporation	07/01/1992			+	
	B10			tachi Co., Ltd., Hitachi	06/06/199			+-	
	B11	9-147581	J Vi	LSI Engineering Corp.	05/28/198				
	B12	59-92483			03/12/199			┼	
	B13	8-69696	1 1 '	oshiba Corp.	03/12/199			+	
	B14	8-18018	1 1 1	oshiba Corp.	04/07/199		· · · · · · · · · · · · · · · · · · ·	+-	
	B15	7-93499		itachi Co., Ltd., Hitachi LSI Engineering Corp., itachi Tobu	04/07/199				
	D46	7-84871	-   S	emiconductor Co., Ltd.	03/31/199	95		$\top$	
	B16	7-334996	<del></del>		12/22/199	95			
	B18	7-334990	<del>-  -</del>  -	uji Film Micro Device	11/28/199	5 RF	CEIV	吐	
	310	1-011700	K	.K., Fuji Photo Film Co., td.		1 8 8 8 -			
	B19	7-235193		.u	09/05/199	95 N	AR 1 8 20	104	
	B20	7-141258			06/02/199	95			
	B21	7-114499			05/02/199	Techn	ology Cent	er 2	
	B22	6-4399			01/14/199	94			
	B23	6-36578	s	ony Kabushiki Kaisha	02/10/199				
_	B24	6-266596	H	litachi Ltd.	09/22/199				
	B25	6-149395	1 1 '	IEC	05/27/199			_	
	B26	6-132747	T F	ujitsu Ltd., Fujitsu VLSI td.	05/13/199	94		- [	
	B27	6-131889		oshiba Corporation	05/13/199	94			
	B28	6-124231	<del>-  -</del>	oshiba Corporation	05/06/199	94			
	B29	6-124175	<del>-        </del>	Sharp Corp.	05/06/199	94			
	B30	5-282883	1	oshiba Corp.	10/29/199	93			
-+	B31	5-128877		Mitisubishi Electric Corp.	05/25/199				
	B32	4-57295		NEC Corporation	02/25/199				
	B33	4-278297		oshiba Corp.	10/02/199		<u> </u>		
<del></del>	B34	4-268284	1 1	uji Photo Film Co., Ltd	09/24/199			_	
	B35	4-254994		oshiba Corp.	09/10/199			_	
	B36	RM-37697		- 11 4	02/21/199	<u> </u>		+	
	B37	3-228377		oshiba Corp.	10/09/198			+	
	B38	1-138694	1 1	Nippon Denki Kabushiki Kaisha	05/31198				
	B39	WO 94/20906		M-Systems Ltd.	09/15/19			$\bot$	
	B40	SU 1686449		N.G. Parkhomenko, S.B. Kozelkov, V.Yu Lozbenev and S.S. Karpenko	10/23/19			3.11	
1	B41	SU 1573458	A2	N.G. Parkhomenko, V. Yu. Lozbenev, V.G. Chernyaev and S.B. Kozelkov	06/23/19	990			
	B42	SU 1541619	A1	K.G. Semenov, N.M. Sidorov, A.I. Zhdanov, G.V. Kukhar and V.I. Potanenko	02/07/19				
	B43	SU 1515164	A1	.V. Dementiev and A.S.	10/15/19	989		- 1	
igspace	B44	SU 1408439	A1 1	Papkov V.V. Merkul, I Yu. Manukin	07/07/19	988		$\neg$	
1			1 1:	and M.N. Gurevich N.G. Parkhomenko, V. Yu.	04/15/19	988		+	
mr	B45	SU 1388877	1 1	N.G. Parkhomenko, V. Yu. Lozbenev and A.P. Kuprovskij	07/10/13				

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	ĪΤ
Examiner Initials*	1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.  MENDEL ROSENBLUM and JOHN K. OUSTERHOUT, The Design and Implementation of a Log-Structured File System, article, 1991, 15 pgs.,	2
m. M		MENDEL ROSENBLUM and JOHN K. OUSTERROOT, The Design and Imperiation in the Memory of the Berkeley, USA  Brikan DiPERT and MARKUS LEVY, Designing with Flash Memory, book, April 1994, 445 pgs., Annabooks, San Diego, USA	1 1
	C2	BRIAN DIPERT and MARKOS LEVT, Designing with the	

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Substitute for form 1449A/PTO					Comp if Known				
Substitute	tor tori	11 1449/7/10			Application Number	10/054,451			
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	(use a	s many sheet	s as n	ecessary)	Examiner Name	Namazi, Mehdi			
Sheet		6	of	6	Attorney Docket Number	38979-80US			
m.p	СЗ				ry Symposium '95, symposium, 1995, 13 pgs.;				
///	C4				An Extended File Service Exploiting Write-Onc				
	C5	JASON GAIT, The	e Optical	File Cabinet: A Random-Acces	s File System for Write-Once Optical Disks, ar	ticle, June 1988, 12 pgs., Bea			

Sheet_		b of		Attorney Docket Number   36979-6003				
n.v	C3			Memory Symposium 95,symposium,1995,13 pgs.; Hongo,Bunkyo-ku,Tokyo				
***	C4	ROSS S. FINLAYSON and DAVID R. CHERITON, An Extended File Service Exploiting Write-Once Storage, article, 1987, 10 pgs. ACI						
	C5	JASON GAIT, The Option	al File Cabinet: A Random-	Access File System for Write-Once Optical Disks, article, June 1988, 12 pgs., Beaverton, Oregon				
	C6			anagement, book, 1995, 19 pgs., Springer-Verlag Berlin Heidelberg, Germany				
+	C7			AUM, A Distributed File Service Based on Optimistic Concurrency Control, article, 1985, 12 pgs., ACM				
1	C8		MAND Clock Momorine	NICHI IMAMIYA and YOSHIHISA IWATA, A Novel Sense Amplifier for Flexible Voltage Operation				
1 1	C9		A, JUNICHI MIYAMOTO, KE	NICHI IMAMIYA, YOSHIHISA IWATA, YOSHIHISA SUGIURA and HIDERO OODAIRA, A Novel				
	C10	TAKAAKI NOZAKI, TO	SHIAKI TANAKA, YOSHIRO	O KUIYA, EITA KINOSHITA, TATSUO TSUCHIYA and YUTAKA HAYASHI, A 1-Mile EET NOM WITH				
-	C11	KAI HWANG	and FAYE A. BRIGGS, Co.	mputer Architecture and Parallel Processing, book, 1984, McGraw-Hill, Ilic., 2 pgs., 65				
<del>  -</del>	C12	1		the Art: Magnetic VS. Optical Store Data in a Flash, article, 1990, 7 pgs., Vol. 15, No. 12, McGraw- Hill, Inc., US				
+	C13	RON WILSON, INTE	GRATED CIRCUITS; 1-Mbit	flash memories seek their role in system design, article, March 1, 1989, 2 pgs., No.6, Tulsa, OK				
	C14	E. HANN, R.W. GREGO	)R, E.P. EBERHARDT, J.R.	HEN, D.C. GUTEMAN, G. SAMACHISA, R.D. NOMAN, M. MOFIDI, W.LEE, Y. FONG, A. MIHNEA, RADOSEVICH, K.R. STILES, R.A. KOHLER, C.W. LEUNG, and T.J. MULROONEY, Serial 9Mb F tate Disk Applications, symposium, 1992, 2 pgs., Mountain View, CA				
1	C15	STEVEN H.	LEIBSON, Nonvolatile, in-c	circuit-reprogrammable memories, article, January 3, 1991, 12 pgs., EDN, Circle No. 12				
<b>—</b>	C16			the Art: Magnetic VS. Optical Store Data in a Flash, article, 1990, 7 pgs., Vol. 15, No. 12, McGraw- Hill, Inc., US				
+-	C17			omputer Architecture and Parallel Processing, book, 1984, McGraw-Hill, Inc., 2 pgs., US				
+-	C18	STEVEN H	LEIBSON, Nonvolatile, in-	circuit-reprogrammable memories, article, January 3, 1991, 12 pgs., EDN, Circle No.12				
<u> </u>	C19		Octob	BRIAN MARSH, Operationg System Implications of Solid-State Mobile Computers, article, 7 pgs., er 1993, Workshop on Workstation Operting Systems				
	C20	t contract of the contract of	J and WILY ZWAENEPOEL	., A Non-Volatile, Main Memory Storage System, 12 pgs., 1994, ACM, San Jose, CA USA				
1	C21	systems (includes rela	ited articles on the origins o	th DRAM densities: available with a choice of features, flash memories are finding homes in many of flash, and on the differences between NAND and NOR flash memories), article, May 16, 1994, 9 ps., Electronic Design, v.42, n.10, The Gale Group				
1	C22	Samsung Semiconduc	O, New flash enhancements ctor's KM29V32000 *flash* n	s up ante. (Intel's 28F400BV-120 and 28F004BV-120, Atmel's ATZ9BV010 and A1Z9BV020, and memory* devices)(Product Announcement), article, March 13, 1995, 4 pgs., Electronic News, v.41, 2005, The Cale Group.				
	C23	SAM WEBER, *Flash	'modules' portability, reusal	bility, small size valued for a host of APPs-Consumer formats flocking to "flash", article, 7/22/96, 9 5, Electronic Engineering Times, n.911, CMP Media				
+	C24		TOSHIE	BA, MOS MEMORY (NON-VOLATILE), 1995, Data Book				
+-	C25			R HARDWARE, SOFTWARE CHANGES: Flash: designers face the dawn of a new memory age, pgs., Electronic Engineering Times, 1990, N.619, 41, CMP Media				
+	C26	TOSHIBA, TOS	HIBA MOS DIGITAL INTEG	GRATED CIRCUIT SILICON GATE CMOS, (TC58NS512DC) 3/21/2001, 45 pgs., Data Book				
-	C27			tmedia Interface Library) Hardware Edition Version 1.00, July 1, 2000, 36 pgs., Data Book				
-	C28	TOSHIBA	, TOSHIBA MOS DIGITAL II	NTEGRATED CIRCUIT SILICON GATE, (TC58512FT), 3/05/2001, 43 pgs., Data Book				
<del></del>	C29	TOSHIBA, TO	SHIBA MOS DIGITAL INTE	GRATED CIRCUIT SILICON GATE, (TC58DVM92A1FT00), 1/10/2003, 44 pgs., Data Book				
	C30	TOSHIBA, TO	SHIBA MOS DIGITAL INTE	GRATED CIRCUIT SILICON GATE, (TC58DVG02A1FT00), 1/10/2003, 44 pgs., Data Book				
	C31	TOSHIBA	, TOSHIBA MOS DIGITAL I	INTEGRATED CIRCUIT SILICON GATE, (TH58100FT), 3/05/2001, 43 pgs., Data Book				
$\top$	C32			VIEW, A Time of Change, Proceedings 1993 Conference, June 22-24, 1993, Linthlcum Heights, MD USA				
	C33	TOSHIBA CO	RPORATION, SMIL (Smart	tmedia Interface Library) Software Edition Version 1.00, July 1, 2000, 136 pgs., Data Book				
	C34			MOS MEMORY (NON-VOLATILE), 1996, 279 pgs., Data Book				
	. C35	DAN AUCLAII	Ontimal Solid State Disk	Architecure For Portable Computers, symposium, July 9, 1991, 7 pgs., SunDisk Corporation				

Examiner Signature Date Considered 4-27-24MAR 1 8 2004

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if the conformation is in conformance with MPEP 609. Draw line through citation if the conformation is in conformance with MPEP 609. Draw line through citation if the conformation is in conformance with MPEP 609. Draw line through citation if the conformation is in conformance with MPEP 609. Draw line through citation if the conformation is in conformance with MPEP 609. Draw line through citation if the conformation is in conformance with MPEP 609. Draw line through citation if the conformation is in conformance with MPEP 609. Draw line through citation if the conformation is in conformation in conf

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